

## **ABSTRACT**

The present invention provides a method of providing Differentiated Service (DiffServ) based Quality of Service (QoS) to Voice over Internet Protocol (VoIP) packets through a router. In the QoS providing method, VoIP call session information including source and destination IP addresses, source and destination user datagram protocol (UDP) port numbers, and requested QoS information is provided to the QoS control server by the VoIP call control device. Source and destination routers are found using the VoIP call session information and the VoIP call session information requiring provision of QoS is sent to the source and destination routers by the QoS control server. The present invention can recognize VoIP packets, provide QoS to the VoIP packets, and transmit voice packets of high quality.